
Here Goes the Long and Fancy Title of this Elaborate Thesis About Important Stuff

Mechanical Engineering

Submitted in satisfaction of the requirements for the degree of

Master of Science

by

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on

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First Examiner: *Prof. Dr. rer. nat. Timmy Brown*
Computational Mechanics

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Abstract

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Chapter 1

Introduction

Chapter 2

Example Chapter

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$$\int_{\Omega} \varepsilon(\delta \mathbf{u}) : \mathbf{C} : \varepsilon(\mathbf{u}) \, d\Omega = \int_{\Omega} \delta \mathbf{u} \mathbf{p} \, d\Omega + \int_{\Gamma_N} \delta \mathbf{u} \mathbf{q} \, d\partial\Omega + \int_{\Gamma_D} \delta \mathbf{u} \mathbf{q} \, d\partial\Omega \quad (2.1)$$

$$\wedge \quad \mathbf{u} = \bar{\mathbf{u}} \quad \forall \mathbf{x} \in \Gamma_D$$

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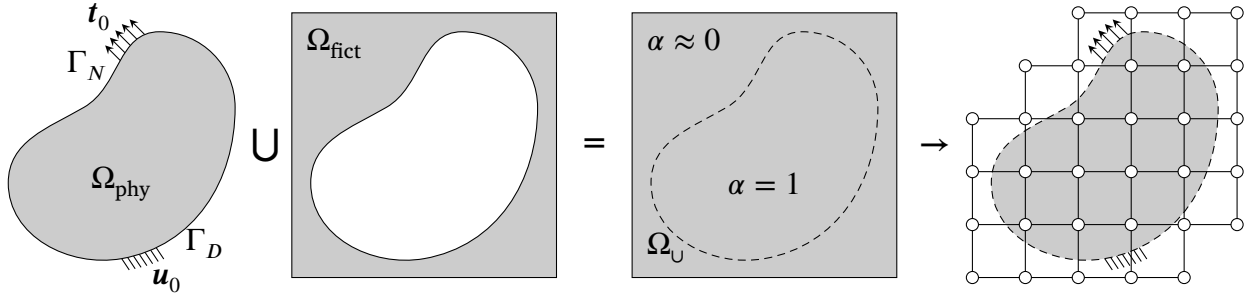


Figure 2.1: This is an example image. The visualization has been done using the TikZ package.

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2.1.1.1 First subsubsection

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2.1.1.2 *Second subsubsection*

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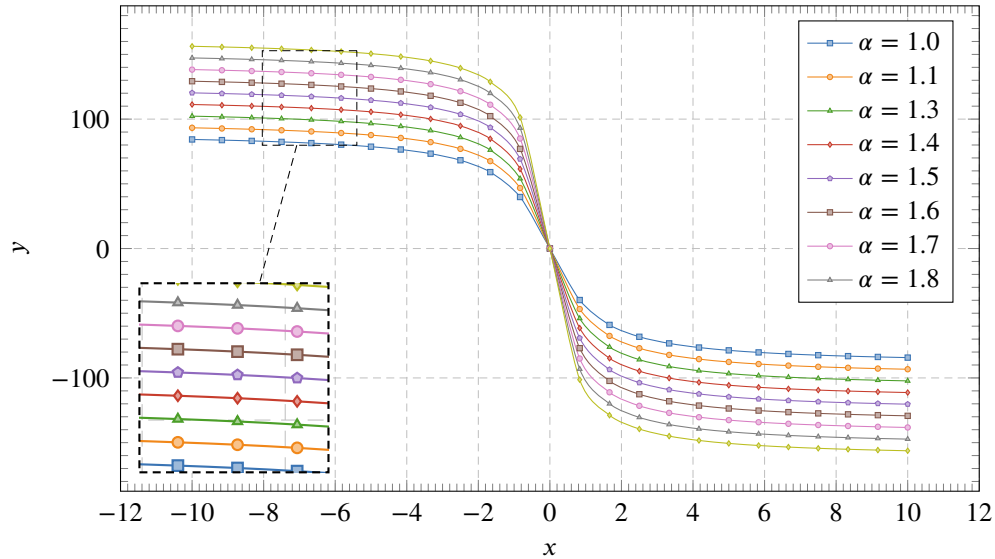


Figure 2.2: This is an example plot. The visualization has been done using the `pgfplots` package.

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Example of 'notebox': Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Example of 'importantbox': Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

```

1 function unit_bounding_box( dimension::Int64 )
2     return BoundingBox(
3         dimension, zeros( dimension ), 2.0 .* ones( dimension )
4     )
5 end # function

```

Algorithm 2.1: Example of 'lstlisting' with Julia code

Example of 'alertbox': Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Example of a 'TODO'. These can be placed during writing to add comments on open tasks.

Chapter 3

Conclusion and Outlook

Bibliography

[Bathe, 2007] Bathe, K.-J. (2007). *Finite element method*. Wiley Online Library.

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Declaration of Academic Integrity

I, Jason Miller, hereby affirm that I have written this thesis on my own and that I have used no sources or aids other than the ones stated.

This is the final version of the thesis, to be graded by Hochschule Düsseldorf - University of Applied Sciences.

Place, Date

Signature